

DRILL HOLES

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BORDER REV. DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of US 1 (Washington Blvd) and Montevideo Rd. in Howard County. A US 1 southbound exclusive / permissive left turn phase with a Montevideo Rd westbound right turn concurrent phase shall be installed at this location. US 1 (Washington Blvd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA four-phase, semi-actuated mode, with the US 1 (Washington Blvd) approaches continuing to run concurrently. An Exclusive/Permissive left turn phase shall now be provided for the southbound US 1 (Washington Blvd) approach. A right turn concurrent phase shall now be provided for the westbound Montevideo Rd approach. The Montevideo Rd approach shall continue to run in its own phase.
- The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "5" pole-mounted cabinet shall be utilized at this intersection. The SHA forces shall install 4-channel amplifier into cabinet.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY SHA

THERE IS NO EQUIPMENT TO BE SUPPLIED BY THE SHA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

SPEC. NUMBER	DESCRIPTION	QUANTITY
814	112", one-way, three-section (R,Y,G) LED traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 EA
814	12", one-way, five-section (R,Y,YA,G,GA) LED traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 EA
556	5" white heat applied permanent preformed thermoplastic pavement marking	265 L.F.
815	Saw cut for signal (loop detector).	435 L.F.
805	1" galvanized steel electrical conduit (detector wire sleeve)	20 L.F.
805	1" liquid tight flexible non-metallic conduit for detector sleeve.	20 L.F.
805	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched	110 L.F.
811	Furnish and install electrical handhole.	2 EA
810	Furnish and install loop wire encased in flexible tubing (No. 14 AWG).	1595 L.F.
810	Furnish and install electrical cable - 2 conductor (aluminum shielded).	1055 L.F.
810	Furnish and install 7-conductor electrical cable (No. 14 A.W.G.).	165 L.F.
	Remove existing handhole	2 EA
863	4-channel, rack mount loop detector amplifier. (To be installed into the existing pole-mounted cabinet S.H.A. Signal Shop Forces).	1 EA
822	Remove existing traffic signal head.	4 EA
	Remove existing 2-conductor shielded cable.	490 LF
	Remove ground mounted street name sign.	1 EA

The contact persons for District #7 are as follows:

Mr. John Concannon  
Assistant District Engineer - Traffic  
Phone: (310) 624-8141

Mr. Dave Coyne  
Assistant District Engineer - Maintenance  
Phone: (310) 624-8106

Ms. Andrea Abend  
District Engineer - Utility  
Phone: (301) 624-8110

Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

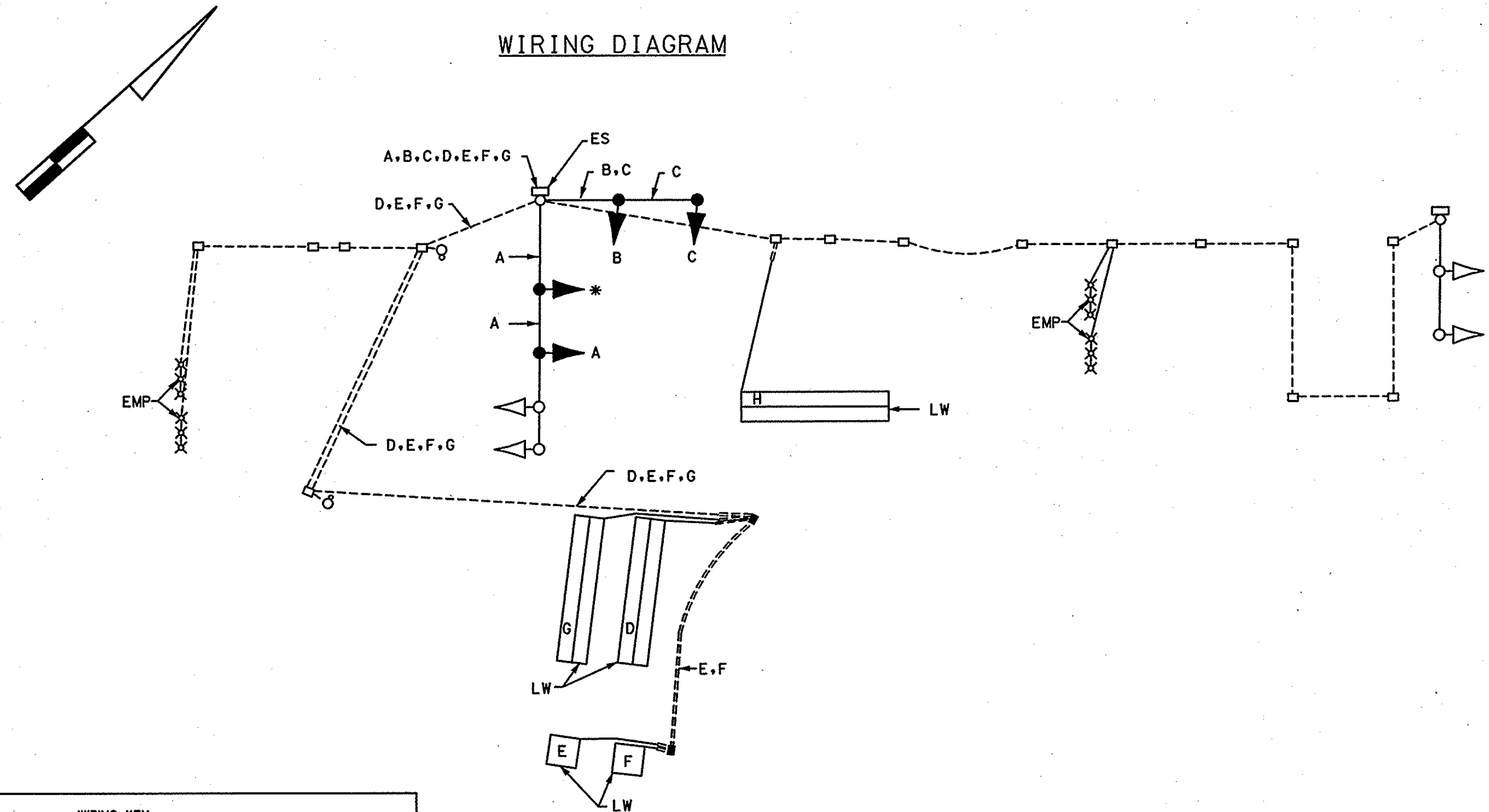
Mr. Ed Rodenhizer  
Signal Shop  
410-787-7652

Mr. Sonny Bailey  
Sign Shop  
410-787-7670

PHASE CHART

	1	2	3	4	5	6	7	8
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(Y)	(Y)
PHASE 2 & 6	G	G	G	G	R	R	FL/Y	FL/Y
2 & 6 CHANGE	Y	Y	G	G	R	R	FL/Y	FL/Y
PHASE 2 & 5	R	R	←G→	G	R	R/←G→	FL/Y	FL/Y
2 & 5 CHANGE	R	R	←Y→	Y	R	R/←Y→	FL/Y	FL/Y
PHASE 4	R	R	R	R	G	G	FL/Y	FL/Y
4 CHANGE	R	R	R	R	Y	Y	FL/Y	FL/Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y

WIRING DIAGRAM



WIRING KEY

A) 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

D) 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
G) ALUMINUM SHIELDED

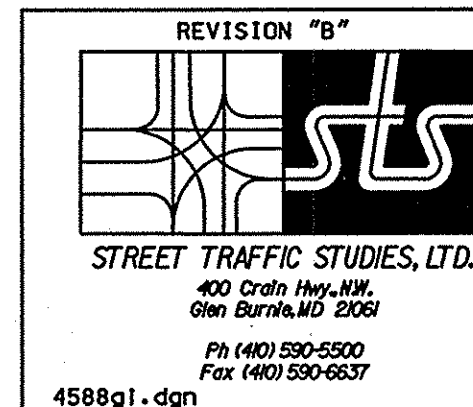
H - 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
ALUMINUM SHIELDED SPLICED TO EXISTING LOOP WIRE

\* - USE EXISTING WIRING

EMP - EXISTING MICROLOOP LEAD-IN CABLE

LW - LOOP WIRE (NO. 14 A.W.G.)

ES - EXISTING SERVICE TO BE MAINTAINED BY BGE



PLOTTED: \$DATETIME\$  
FILE: \$FILE\$

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION

US 1 (WASHINGTON BLVD)  
AND MONTEVIDEO RD.

SCALE NONE DATE 11/30/05 CONTRACT NO.

DESIGNED BY ROB CICCHINI COUNTY HOWARD  
DRAWN BY R ZACHERL LOGMILE 13000106.10  
CHECKED BY TIMS NO. H220  
F.A.P. NO. TOD NO.

TS NO. 1953B DRAWING NO. 3 OF 4 SHEET NO. OF

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